

Application Number 10/628,885
Amendment dated April 25, 2008
Response to Office Action mailed February 25, 2008

REMARKS

This amendment is responsive to the Final Office Action dated February 25, 2008. Applicant has amended claims 1, 19, and 22 and cancelled claims 16-18 and 36-55. Claims 1-4, 6-15, 19-24, 26-35, and 56 are pending upon entry of this amendment.

Claim Rejection Under 35 U.S.C. § 103

In the Final Office Action, the Examiner rejected claims 1-3, 6-11, 15, 22-24, 26-31, 35, and 56 under 35 U.S.C. § 103(a) as being unpatentable over Valois (US 2004/0260818, "Valois") in view of Delany (US 2002/0156879, "Delany"). The Examiner also rejected claim 4 under 35 U.S.C. § 103(a) as being unpatentable over Valois in view of Mitra (US 6,973,460, "Mitra"). The Examiner further rejected claims 12-14, 19-21, and 32-34 under 35 U.S.C. § 103(a) as being unpatentable over Valois in view of Delaney, and further in view of Nelson (US 6,243,713, "Nelson"). Applicant respectfully traverses the rejection to the extent such rejections may be considered applicable to the claims as amended. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested a rational reason to arrive at the claimed invention.

In this Amendment, Applicant has amended the claims for the purpose of clarification. Applicant has amended claim 1, for example, to require storing, within a device, authorization data that defines at least one class of clients that access the device, wherein the authorization data defines for each class of clients an access control attribute and an associated regular expression specifying a textual pattern. Claim 1 as amended also requires receiving, with the device, a command from a client, wherein the command requests access to configuration data for the resource of the device, identifying the class of which the client is a member and retrieving, from the authorization data, the access control attribute and the regular expression for the identified class of which the client is a member. Applicant respectfully submits that claim 1 as clarified by the amendments includes requirements that the prior art fails to teach, suggest, or disclose, alone or in combination.

Valois in view of Delany fails to teach, suggest, or disclose, for example, storing, within a device, authorization data that defines at least one class of clients that access the device, wherein the authorization data defines for each class of clients an access control attribute and an

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associated regular expression specifying a textual pattern as required by amended claim 1.

Valois in view of Delany fails to teach, suggest, or disclose that authorization data defines, for a class of clients, both an access control attribute and an associated regular expression as required by amended claim 1.

Valois generally fails to teach or suggest any method for actually controlling a client's access to a resource of a device as required by claim 1. Instead, Valois teaches a system for verifying compliance with a security policy. Valois, Abstract. Valois also does not disclose how its teachings could be modified to effect controlling access to a resource of a device. Accordingly, Valois fails to disclose or suggest authorization data that defines for each class of clients an access control attribute and an associated regular expression specifying a textual pattern as required by Applicant's claim 1.

Instead, Valois teaches the use of test scripts that express a security characteristic or policy as a test. Valois, ¶ [0055]. These test scripts do not control a client's access to a resource of the tested device, nor could they, as the scripts are executed while the device is offline. Valois, ¶ [0025]. Moreover, the output of the system of Valois is a "pass" or "fail" for each script, rather than a granting or a denying a client's access to a resource of a device. Valois, ¶ [0067]. Valois lacks any mention whatsoever of authorization data that defines at least one class of clients that access the device. Valois therefore necessarily fails to teach that the authorization data defines *for each class of clients an access control attribute and an associated regular expression specifying a textual pattern*. To the extent that Valois teaches regular expressions, Valois teaches that a regular expression is used as one of the test scripts to search an access control list for a particular string. Valois is devoid of any teaching that regular expressions and access control rights are both associated with authorization data for classes of clients that access a device.

The combination of Valois and Delany likewise fails to teach, suggest, or disclose authorization data defines for each class of clients an access control attribute and an associated regular expression specifying a textual pattern. Delany lacks any teaching whatsoever as to a regular expression associated with authorization data as required by Applicant's amended claim 1. Accordingly, Valois in view of Delany fails to teach, suggest, or disclose authorization data that defines at least one class of clients that access the device, wherein the authorization data

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defines for each class of clients an access control attribute and an associated regular expression specifying a textual pattern.

Although discussed primarily with respect to independent claim 1, Applicant's other claims are also patentable due to similar amendments. Applicant has amended independent claim 22 similarly to claim 1. Therefore, independent claim 22 is also patentable.

Applicant has also amended independent claim 19 to require, *inter alia*, receiving input defining at least one class of clients that access a device, wherein the input defines for each class of clients an access control attribute and an associated regular expression that specifies a textual pattern, receiving an access request from a client, identifying the class of which the client is a member, and retrieving the access control attribute and the regular expression for the identified class of which the client is a member.

Valois in view of Delany fails to teach these requirements of amended claim 19 for reasons similar to those discussed above with respect to claim 1. Furthermore, Nelson fails to overcome the limitations of Valois in view of Delany. Nelson was cited for the teaching of preprocessing a regular expression to automatically insert one or more meta-characters into the regular expression. Nelson fails to even teach, suggest, or disclose preprocessing a regular expression, let alone automatically inserting one or more meta-characters into the regular expression. Instead, Nelson merely teaches tokenizing regular text documents. Nelson, col. 10, ll. 39-54. Nelson says absolutely nothing about inserting meta-characters into a regular expression as required by Applicant's claim 19. Likewise, Nelson fails to overcome the limitations of Valois in view of Delany.

For at least these reasons, Applicant's independent claims, i.e. claims 1, 19, and 22, are patentable. As the dependent claims incorporate the limitations of the respective independent claims, the dependent claims, i.e. claims 2-4, 6-15, 20-21, 23-24, 26-35, and 56 are also patentable. Moreover, the dependent claims include a number of limitations likewise not taught, suggested, or disclosed by the applied references.

For example, claim 2 requires wherein controlling access comprises allowing access to the configuration data when the access control attribute denies access to the resource and the textual pattern of the regular expression matches the command. In the Final Office Action, the Examiner cited Valois at ¶ [0067] as disclosing that the access control attribute denies access to

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the resource. However, Valois says nothing about denying access to a resource at ¶ [0067]. Instead, Valois teaches that "if the set of ACLs referenced exactly matches the set of ACLs defined, the test program 26 outputs a 'pass' result 44" at ¶ [0067]. This is in no way related to allowing access to configuration data as required by claim 2. Valois teaches that this comparison is important to diagnosing network security, but says nothing of using such a test program to allow access to configuration data. Valois, ¶ [0068]. The Examiner also cited ¶¶ [0017]–[0018] of Delany as teaching the textual pattern of the regular expression matches the command as further required by claim 2. These cited paragraphs of Delany say absolutely nothing of a regular expression that matches a command. Therefore Valois in view of Delany fails to teach, suggest, or disclose the requirements of claim 2. Similar remarks apply with respect to claim 3, which teaches denying, rather than allowing, access under similar but opposite circumstances.

As another example, claim 6 requires wherein the coarse-grain access control attribute comprises a set of permission bits, and each of the permission bits is associated with a respective group of the resources within the network device. In the Office Action, the Examiner cited ¶ [0161] of Delany as disclosing this requirement of claim 6. However, this cited portion of Delany says nothing of a permission bit being associated with a respective group of resources. The cited portion merely describes the general notion of access control as disclosed by Delany. The word "bits" does not even occur in the specification of Delany. Likewise, the word "bits" does not occur in the specification of Valois. Therefore Valois in view of Delany fails to teach or suggest wherein the coarse-grain access control attribute comprises a set of permission bits, and each of the permission bits is associated with a respective group of the resources. Moreover, the Examiner previously argued that the URL prefixes and hosts names are coarse-grain access control attributes defined by authorization data. The URL prefixes and host names of Delany could not comprise permission bits associated with groups of resource within the network device. Claim 26 comprises a similar requirement for which similar arguments apply.

For at least these reasons, the Examiner has failed to establish a prima facie case for non-patentability of Applicant's claims 1–4, 6–15, 19–24, 26–35, and 56 under 35 U.S.C. § 103(a). Applicant therefore respectfully requests withdrawal of this rejection.

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CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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April 25, 2008


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